

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 7, line 2 with the following new paragraph:

FIG. 1 is a schematic view of an aqueous mixture distribution network contained within a power plant exhaust duct system incorporating an embodiment of the inventive vaporization chamber therein.

Please replace the paragraph beginning at page 8, line 4 which starts with "As illustrated in FIG. 1" with the following new paragraphs:

As illustrated in FIG. 1, a schematic of an embodiment 10 of power plant having an embodiment of an inventive vaporization chamber assembly 70. The vaporization chamber assembly 70 is part of a power plant which utilizes a selective catalytic reduction (SCR) process to remove components which are harmful to the atmosphere such as oxides of nitrogen (NO_x) from a stream of flue gas 12. The use of the SCR process is not limiting but is merely illustrative. This process involves introducing an aqueous mixture in a vaporized state 34 and containing, in part, ammonia into the stream of flue gas 12 having atmospherically harmful components through a distribution grid network 18. The flue gas/aqueous mixture flow 14 then passing over a catalyst 22. The resulting flow 16 has a reduced amount of atmospherically harmful components therein.

Vaporization chamber assembly 70 is shown to include a vaporization chamber 42 having a heat source 44, such as a band heater. The mention of a band heater is merely illustrative and is not meant to be limiting. Those skilled in the art will understand and appreciate other heat sources can be used with the present invention. Heat source 44 heats the vaporization chamber to a temperature sufficient to vaporize the aqueous mixture, otherwise known as a vaporization temperature. Vaporization chamber 42 additionally has an inflow 60 for receiving the aqueous mixture in a liquid state 30 from a storage unit 32

and an outflow 62 for providing the aqueous mixture in a vaporized state 34 to the distribution grid network 18 for mixing with the flue gas 12.